

Figure 1

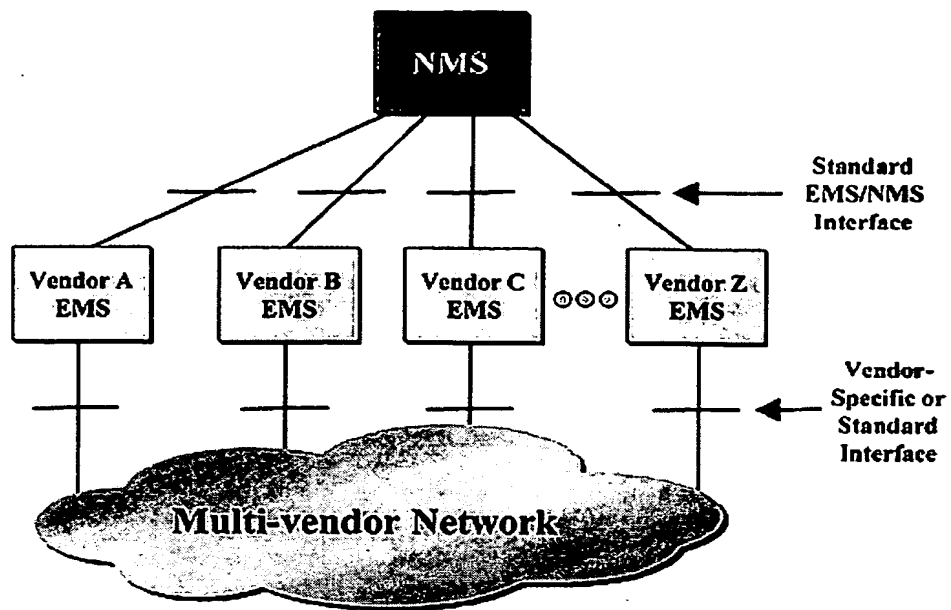


Figure 1A
Prior Art

BML- Manage the overall business,
e.g., achieving return on investment, market
share, employee satisfaction, community
and governmental goals.

SML- Manage the services offered to customers.
e.g., meeting customer service levels,
service quality, cost and
time-to-market objectives.

NML- Manage the network and systems that
deliver those services, e.g., capacity,
diversity, and congestion.

EML- Manage the elements comprising
the networks and systems.

NEL- Switches, transmission,
distribution systems, etc...

Business Management Layer

Service Management Layer

Network Management Layer

Network Element Management Layer

Network Element Layer

Figure 1B
Prior Art

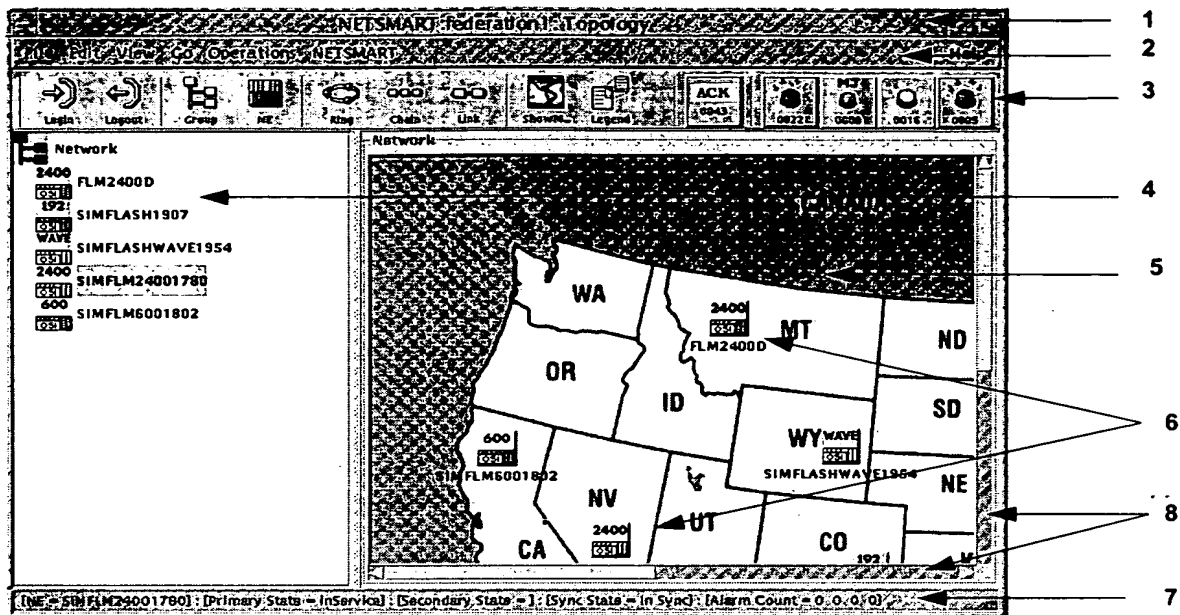


Figure 2

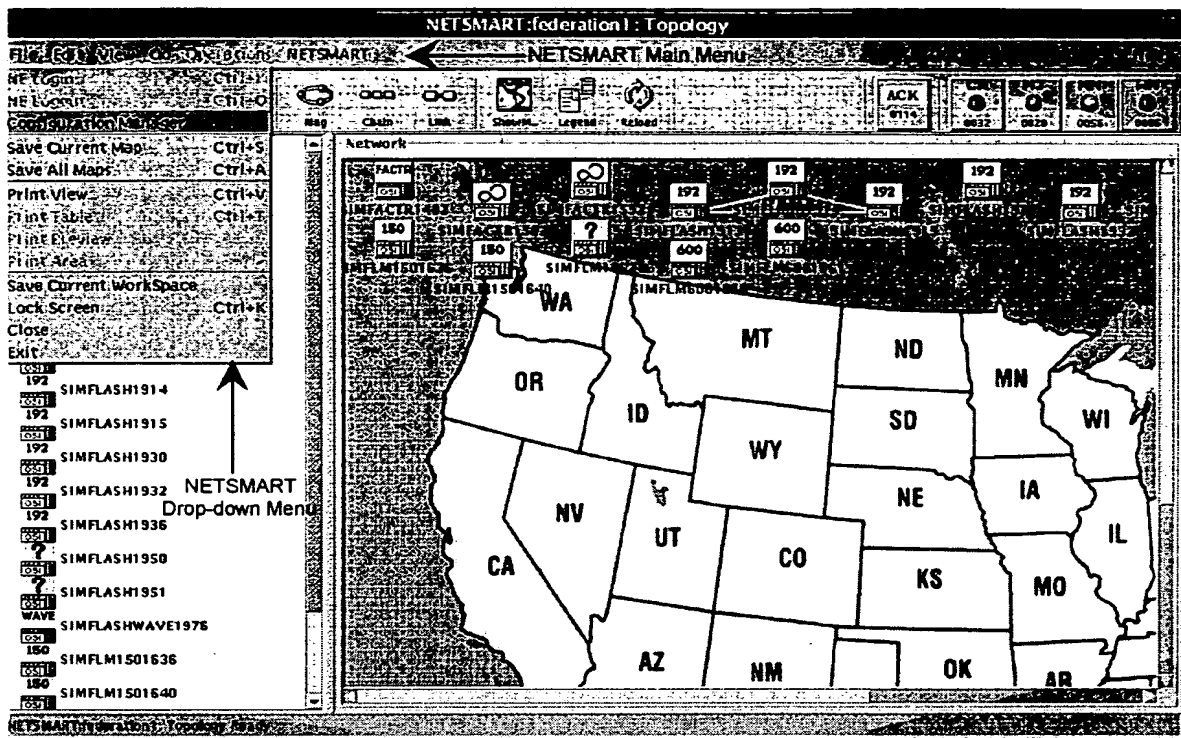


Figure 3

Filter			
Field	Test	Value	Logic
(none)	(none)	Text/Data Entry Field	AND
(none)	(none)		AND
Wavelength (nm)	(none)		AND
Frequency (THz)	(none)		AND
Transponder or 10G Port	(none)		AND
AD	(none)		AND
Status	(none)		AND
OCN WLR (nm)	(none)		AND
OCN OPT (dBm)	(none)		AND
WDM OPT (dBm)	(none)		AND
WDM OPT (dBm)	(none)		AND
WDM OPT (dBm)	(none)		AND
(none)	(none)		AND
(none)	(none)		AND
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Drop Down List OK Cancel Clear Help Command Button

Figure 4

Add Link

Group 1: Search Search

Group 2: Search Search

Linkable Termination Ports:

SIMFLASHWAVE1951

OCN	OS1-OCN-1	<input type="checkbox"/> TX <input type="checkbox"/> RX
OCN	OS1-OCN-11	<input type="checkbox"/> TX <input type="checkbox"/> RX
OCN	OS1-OCN-14	<input type="checkbox"/> TX <input type="checkbox"/> RX
OCN	OS1-OCN-15	<input type="checkbox"/> TX <input type="checkbox"/> RX
OCN	OS1-OCN-18	<input type="checkbox"/> TX <input type="checkbox"/> RX
OCN	OS1-OCN-2	<input type="checkbox"/> TX <input type="checkbox"/> RX

SIMFLASHWAVE1957

<input type="checkbox"/> RX <input type="checkbox"/> TX	OS1-OCN-1	OCN
<input type="checkbox"/> RX <input type="checkbox"/> TX	OS1-OCN-11	OCN
<input type="checkbox"/> RX <input type="checkbox"/> TX	OS1-OCN-14	OCN
<input type="checkbox"/> RX <input type="checkbox"/> TX	OS1-OCN-15	OCN
<input type="checkbox"/> RX <input type="checkbox"/> TX	OS1-OCN-18	OCN
<input type="checkbox"/> RX <input type="checkbox"/> TX	OS1-OCN-2	OCN

Unlink Clear All

Ok Apply Cancel Help

Figure 7

1. The first part of the paper is devoted to a review of the literature on the topic. It starts with a general introduction to the field of research, followed by a detailed discussion of the various methods used in the studies. The second part of the paper presents the results of the experiments. It begins with a description of the experimental setup, followed by a presentation of the data and a discussion of the findings. The third part of the paper discusses the implications of the results and suggests directions for future research.

1. The first part of the report, which is the most important, is the "Introduction". It is a very short and concise introduction to the report, which is written in a very simple and easy-to-understand language. It is written in a very simple and easy-to-understand language. It is written in a very simple and easy-to-understand language.

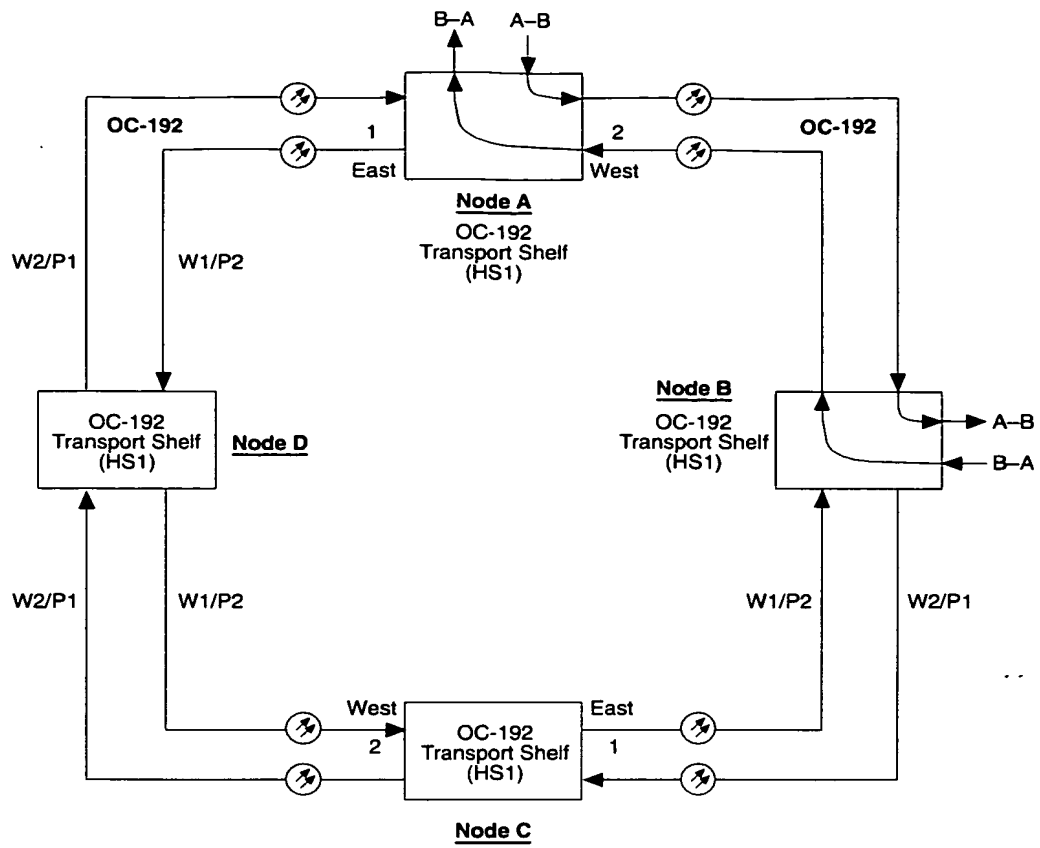


Figure 9

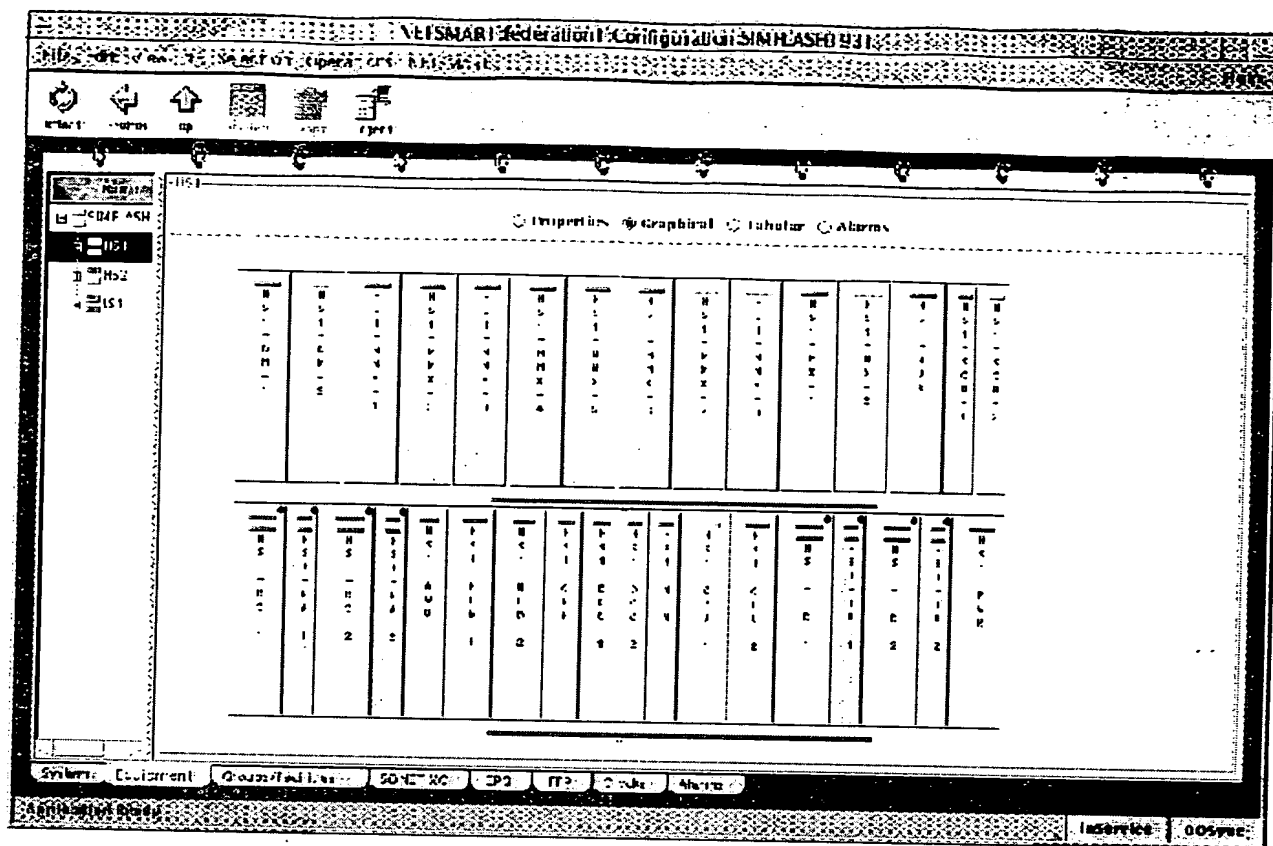


Figure 10

NETSMAN - pslab3 Configuration - FLV600 DS

File Edit View NE Selection Operations NETSMAN

Good FwBns Lb XCSI Part

Names

- FLV600-DS 1
 - VAINSHLEF
 - FWBA-1
 - FWBA-2
 - AWBA
 - EVBA
 - MP6A**
 - GSA
 - TCA-P
 - TCA-W
 - MCCA-3-P
 - MCCA-3-W
 - MCCA-4-P
 - MCCA-4-W
 - MCCA-5-P

MP6A

Properties Alarms

General Information

Access Name (AID) = MP6A
Entity Type = MP6A-ADL

Name	Value
CLEI	SNPQA7B5AA
DOM	94.C3
VENDOR ID	FC3616MFD1
VENDOR REV	01
Primary State	13
Secondary State	

Attributes

System Equipment Groups/Facilities SONET XC EPG FFP Cocks Alarms

Amplitude Ready In Service In Sync

Figure 11

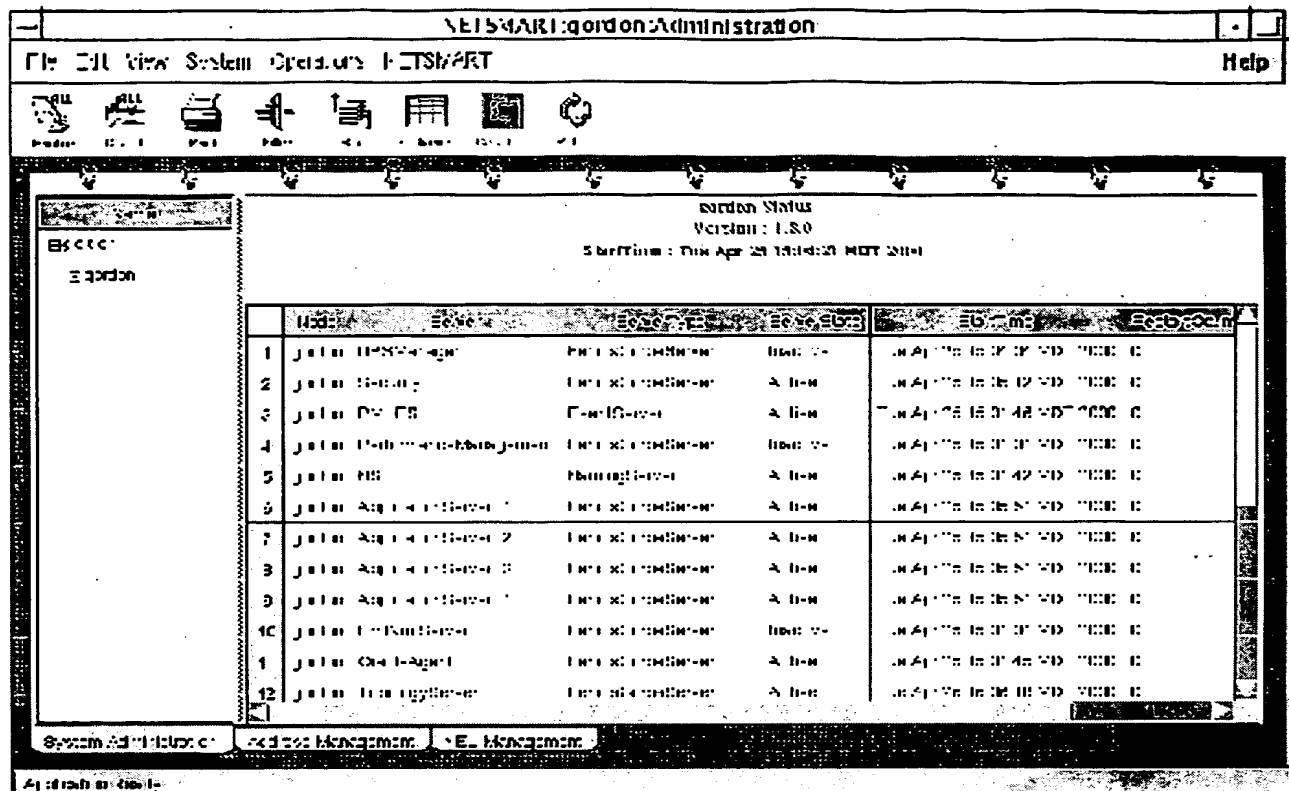


Figure 12

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Figure 13

[illegible]

Figure 14

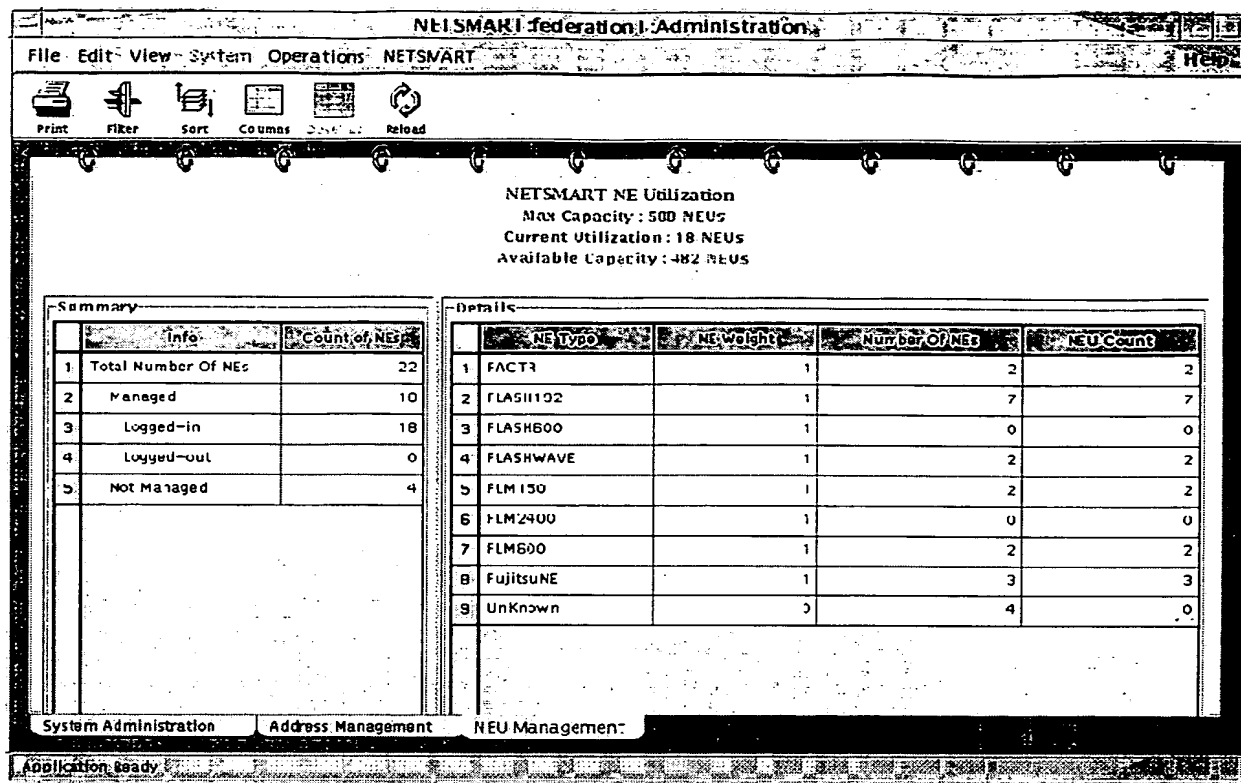


Figure 15

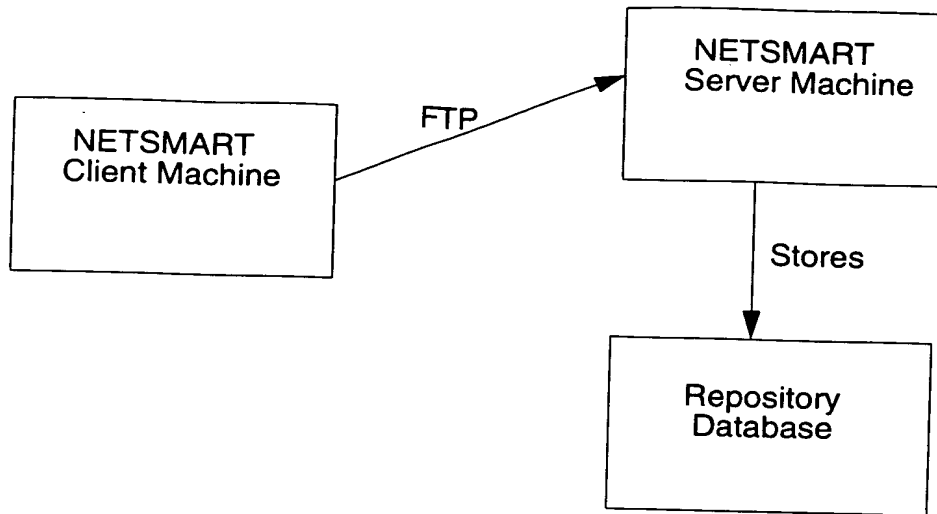


Figure 16

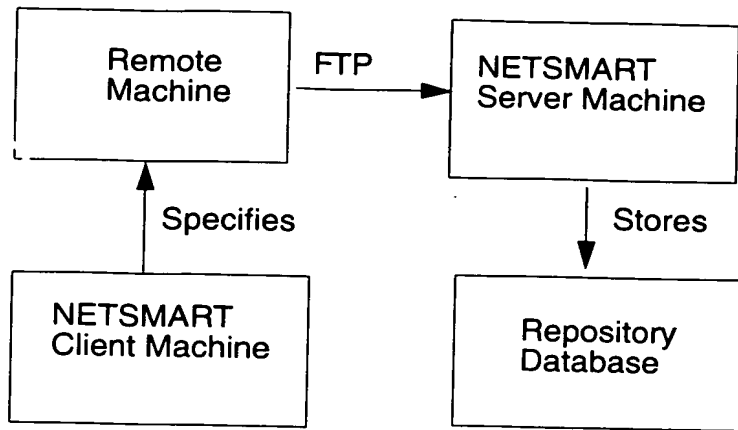


Figure 17

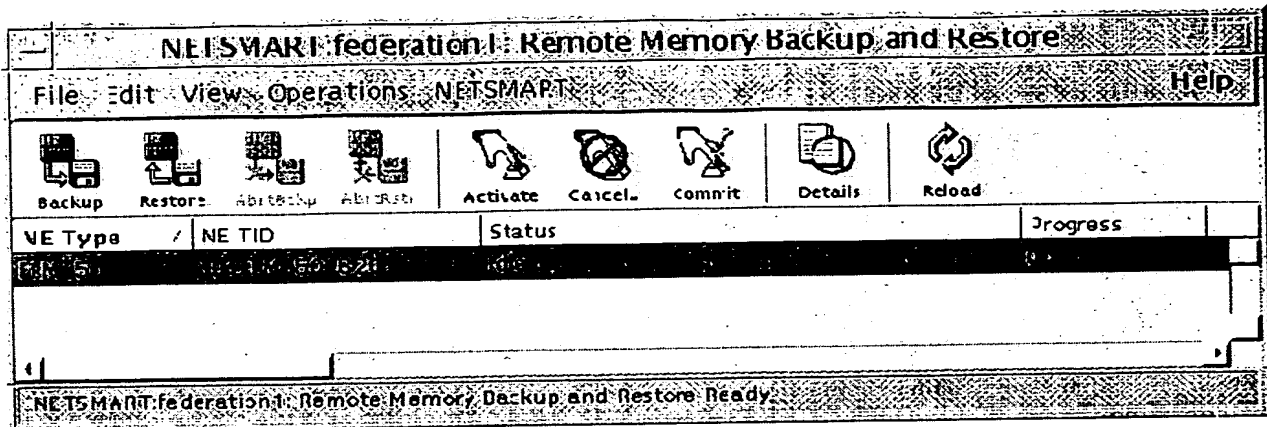


Figure 18

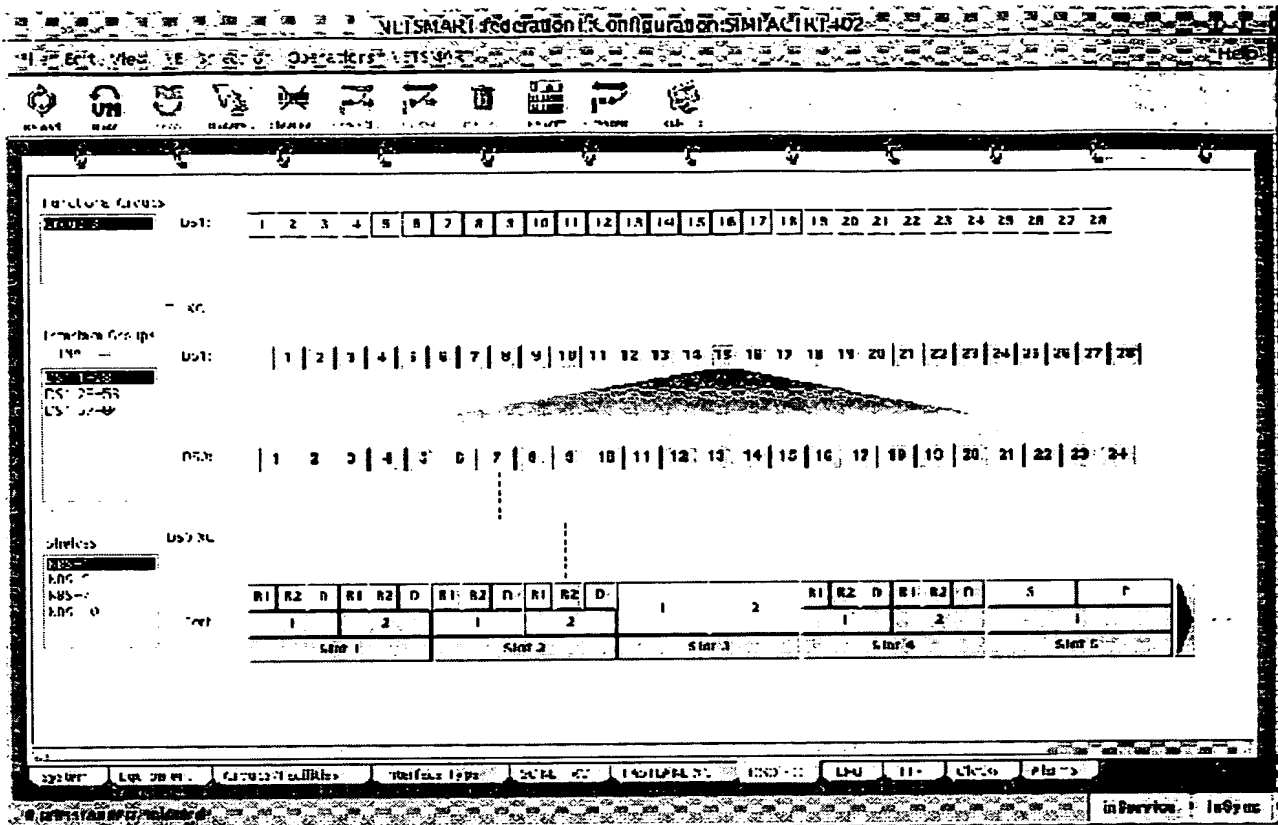


Figure 19

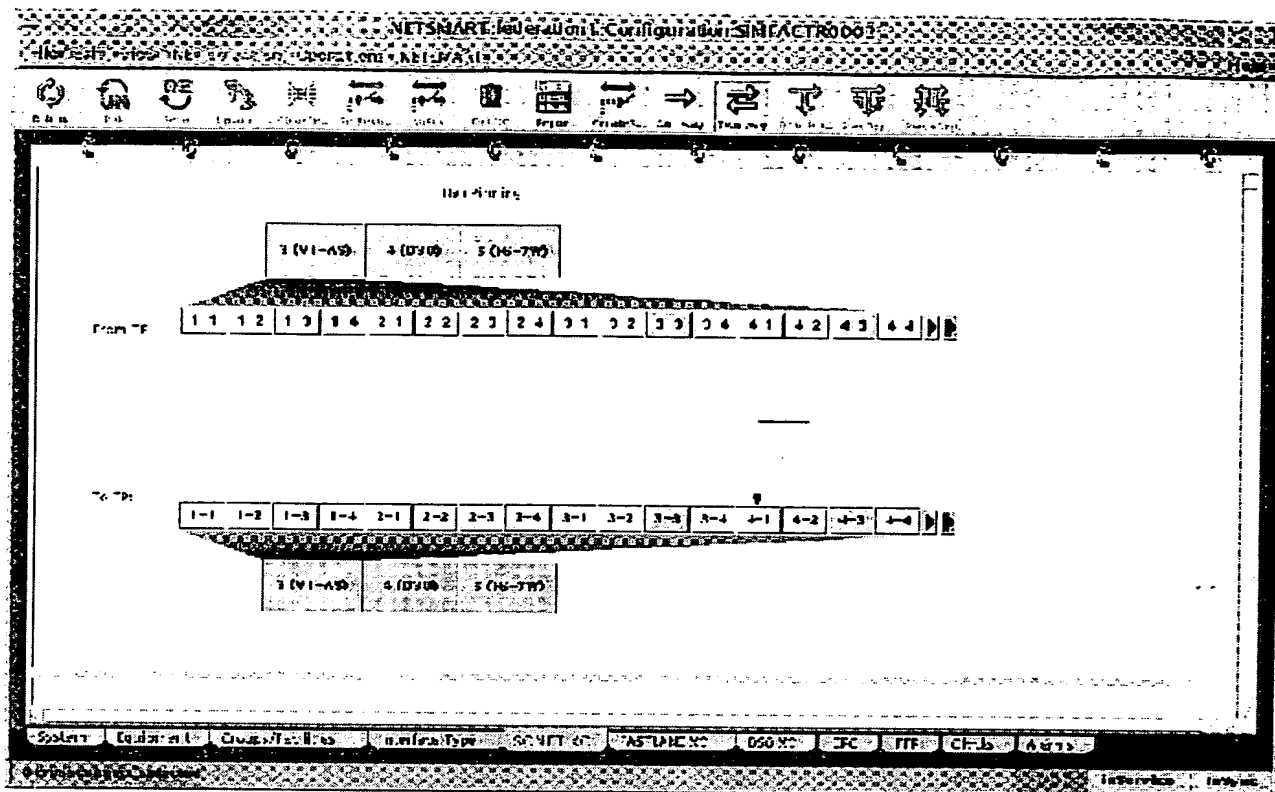


Figure 22

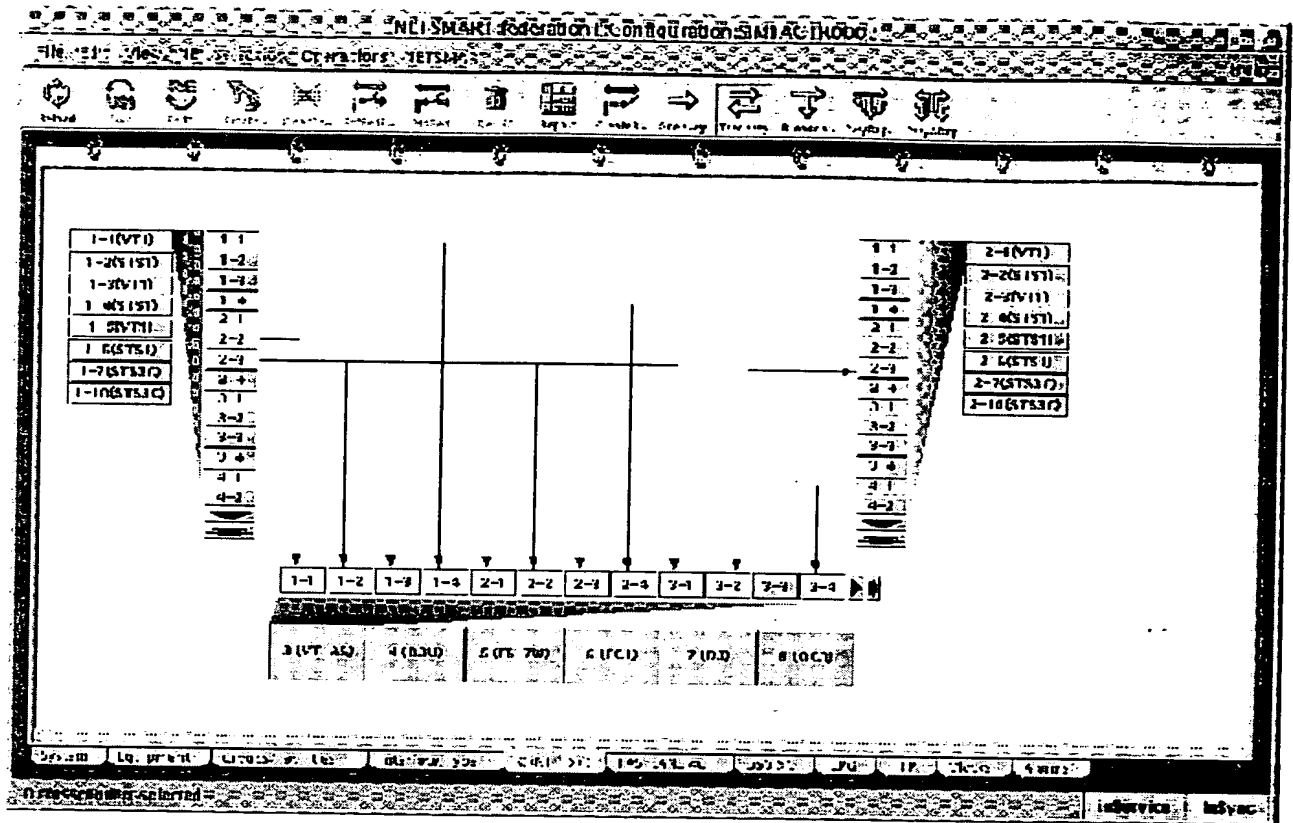


Figure 23







Crossconnect Report							
<div>       </div> <div> PrintFilterSortColumnsDeselectReload </div>							
	From	To	Rate	Redline	Bridge	Crossconnect Name	Crossconnect Type
1	2-3-2-4	1-3-2-4	VT1	No			1WAY
2	1-3-1-1	2-3-1-1	VT1	No			1WAY
3	1-3-1-3	2-3-1-3	VT1	No			1WAY
4	1-3-2-4	2-3-2-4	VT1	No			1WAY
5	2-3-1-1	1-3-1-1	VT1	No			1WAY
6	2-3-1-3	1-3-1-3	VT1	No			1WAY
7	1-2	2-2	STS1	No			1WAY
8	2-2	1-2	STS1	No			1WAY
<div>CloseHelp</div>							

Figure 24

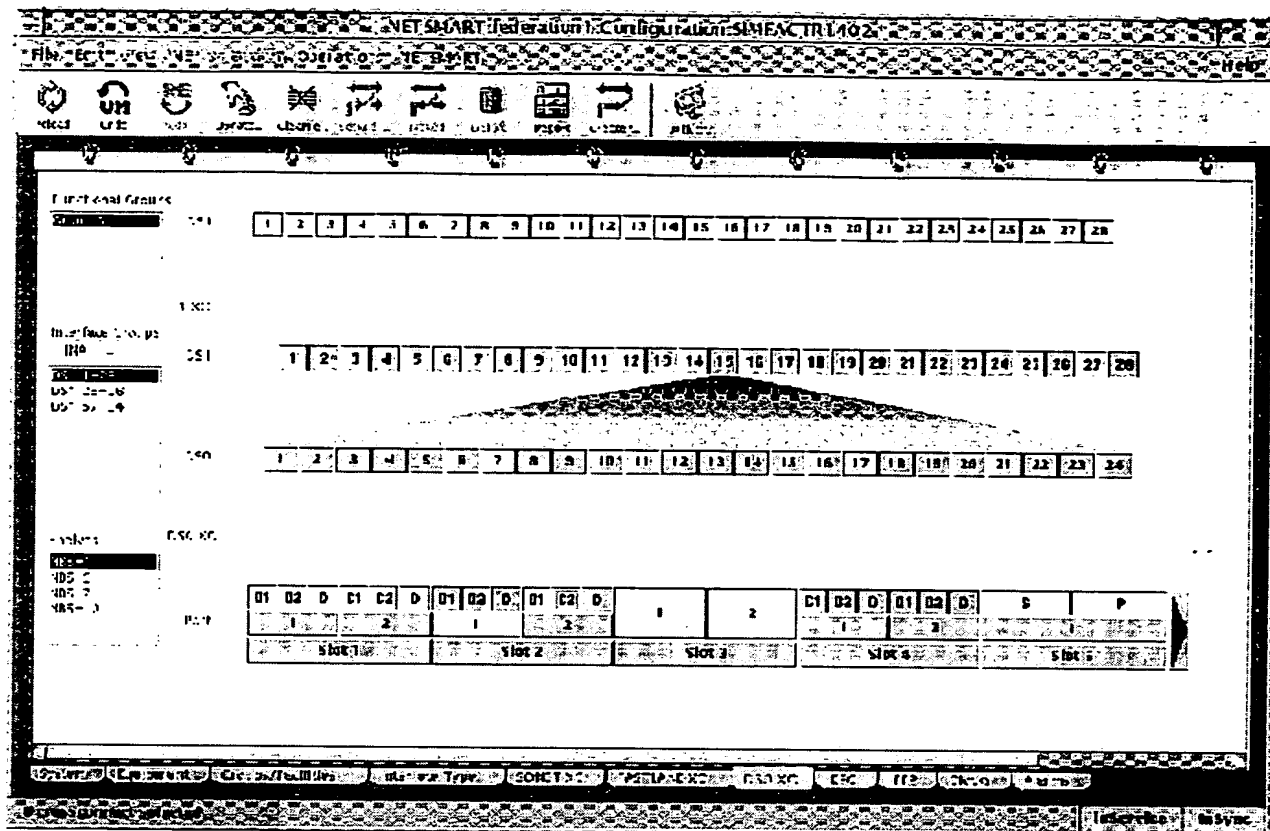


Figure 25

Managing Facilities

Close

Assets

Delete

Reload

Rate: OCN

Shelf: OS1

Existing Facilities

OS1-OCN-1
OS1-OCN-2
OS1-OCN-3
OS1-OCN-5
OS1-OCN-6
OS1-OCN-8
OS1-OCN-9
OS1-OCN-11
OS1-OCN-14
OS1-OCN-15
OS1-OCN-16

Non-existing Facilities

OS1-OCN-4
OS1-OCN-7
OS1-OCN-10
OS1-OCN-12
OS1-OCN-13
OS1-OCN-17
OS1-OCN-18
OS1-OCN-19
OS1-OCN-20
OS1-OCN-21
OS1-OCN-22

Access Name (AID) - OS1-OCN-1

Entity Type - OCN

Name	Value
OPTADJ	+0.0
RATE	10G
primaryState	IS-NR
secondaryState	

Attributes

Figure 26

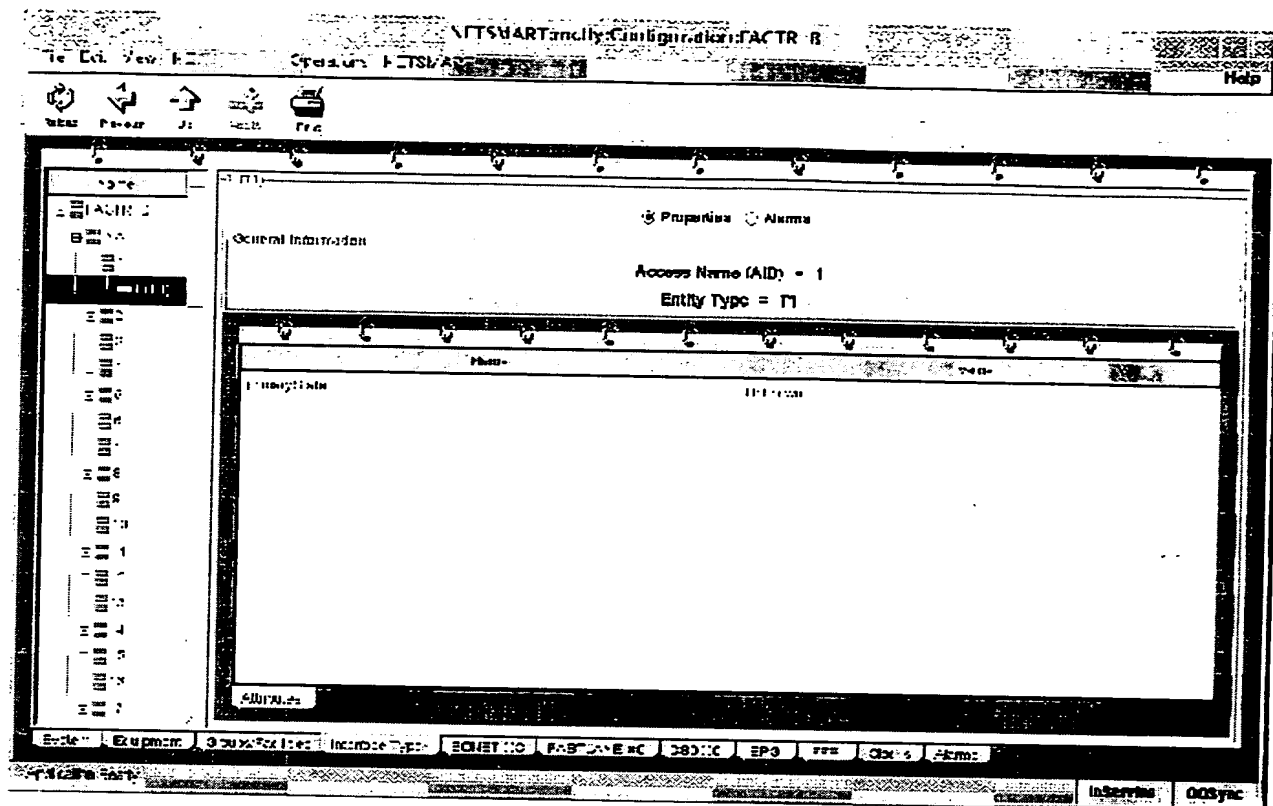


Figure 27

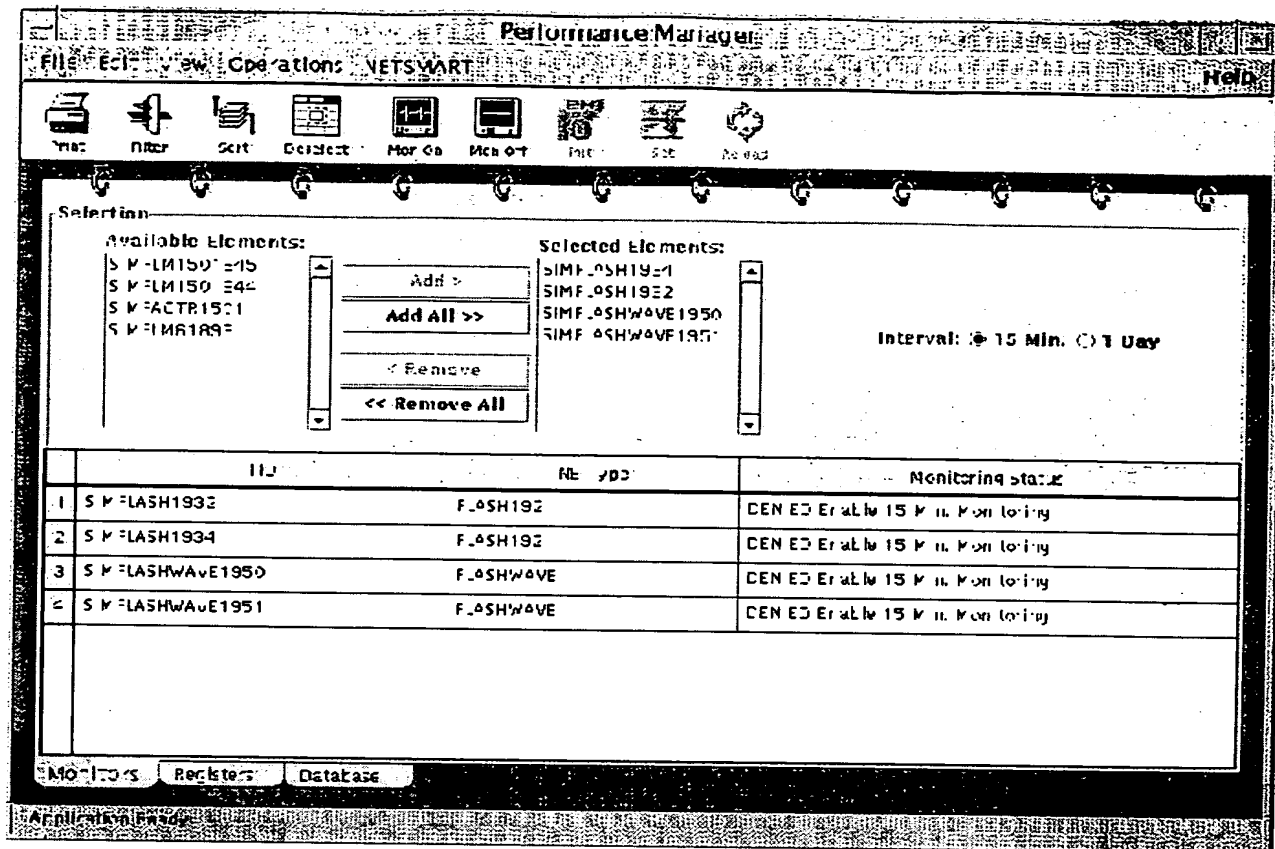


Figure 28

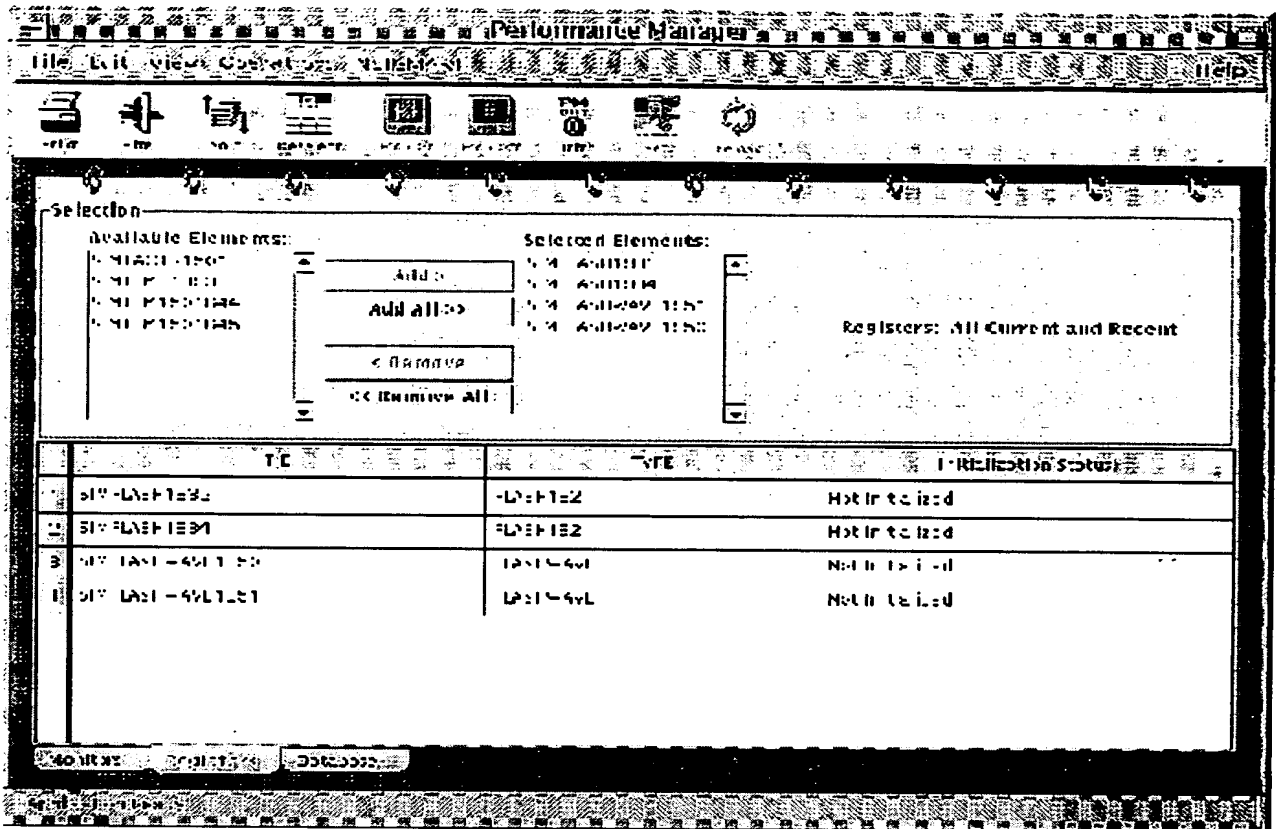


Figure 29

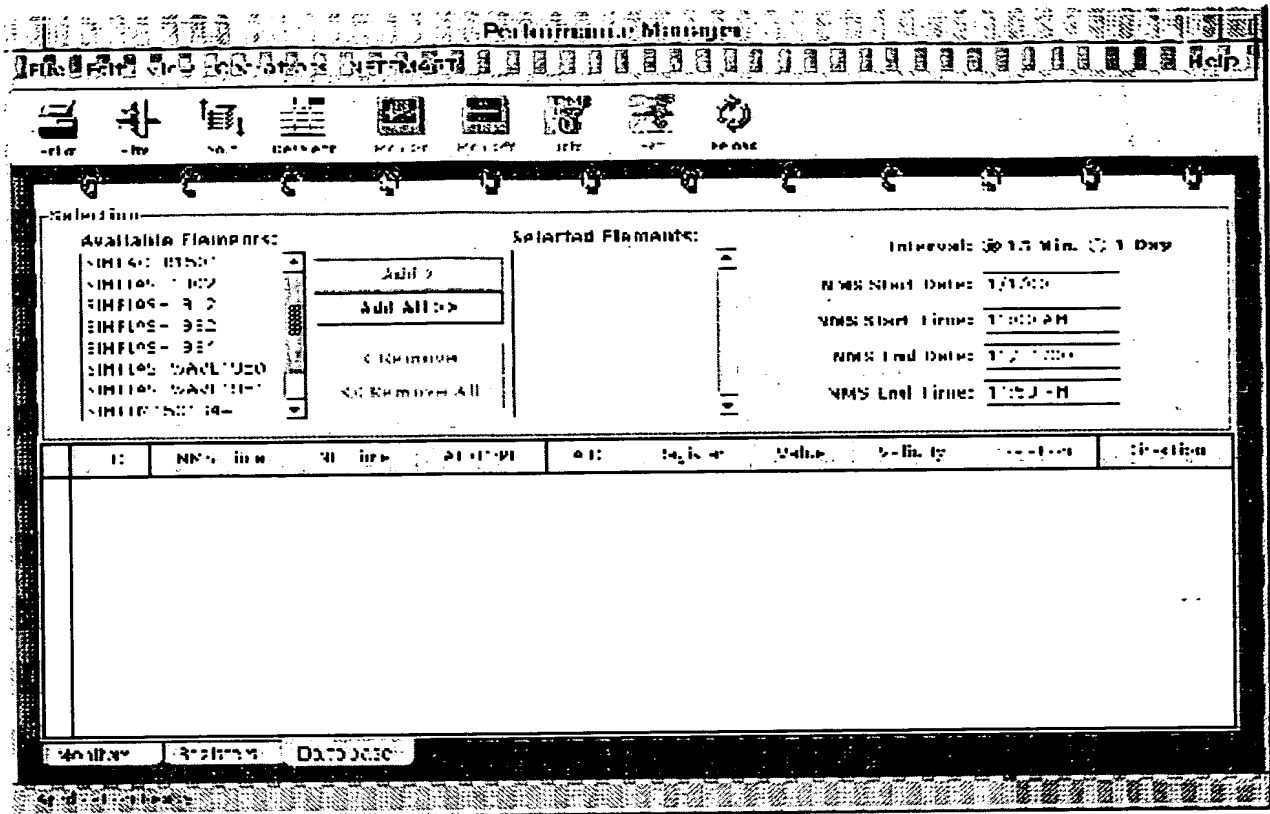


Figure 30

HS1-H12H-2

Selection

Available Equipment:

Add

Add All

Remove

Remove All

Selected Equipment:

	NYS Time	NE Time	A DTYPE	AID	Regist. Value	Range	Threshold
1	Fri Feb 11 14:58:35 EST 2000	Fri Feb 11 14:58:03 PST 2000	EQF	HS1-H12H-2	IRCN	1.0	1.2-1.8 1.5
2	Fri Feb 11 14:58:35 EST 2000	Fri Feb 11 14:58:03 PST 2000	EQF	HS1-H12H-2	IPTN	1.0	0.2-0.8 0.5

Monitors
Registers
Databases

Figure 31

HS1-2 (OC192)

Selection

Available facilities:

Selected facilities:

Location: ☒ NEAD ☐ FEND ☐ NEND&FEND

Direction: ☒ Reprise ☐ NA

Interval: ☒ 15 Min. ☐ 1 Day

Start Index:

End Index:

NNS Time	NE Time	AIDTYPE	AID	Register	Value	Range	Threshold	Default Threshold	Validity	Location	Direction

Variables
Registers
Database

Figure 32







Crossconnect Report							
<div>  Print  Filter  Sort  Columns  Deselect  Reload </div>							
	From	To	Rate	Redline	Bridge	Crossconnect Name	Crossconnect Type
1	2-3-2-4	1-3-2-4	VT1	No			1WAY
2	1-3-1-1	2-3-1-1	VT1	No			1WAY
3	1-3-1-3	2-3-1-3	VT1	No			1WAY
4	1-3-2-4	2-3-2-4	VT1	No			1WAY
5	2-3-1-1	1-3-1-1	VT1	No			1WAY
6	2-3-1-3	1-3-1-3	VT1	No			1WAY
7	1-2	2-2	STS1	No			1WAY
8	2-2	1-2	STS1	No			1WAY
<div> <div>Close</div> <div>Help</div> </div>							

Figure 33

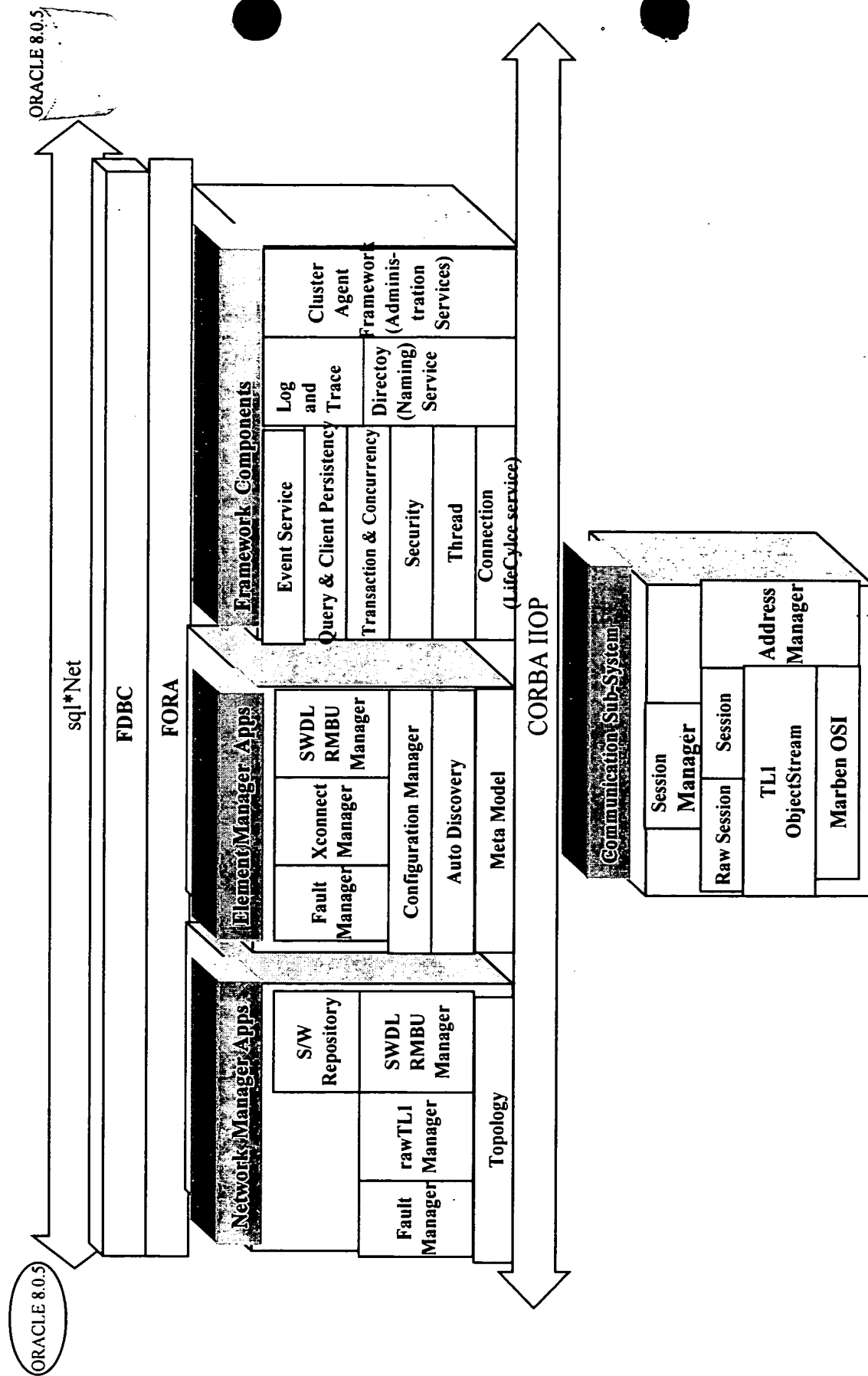


Figure 34

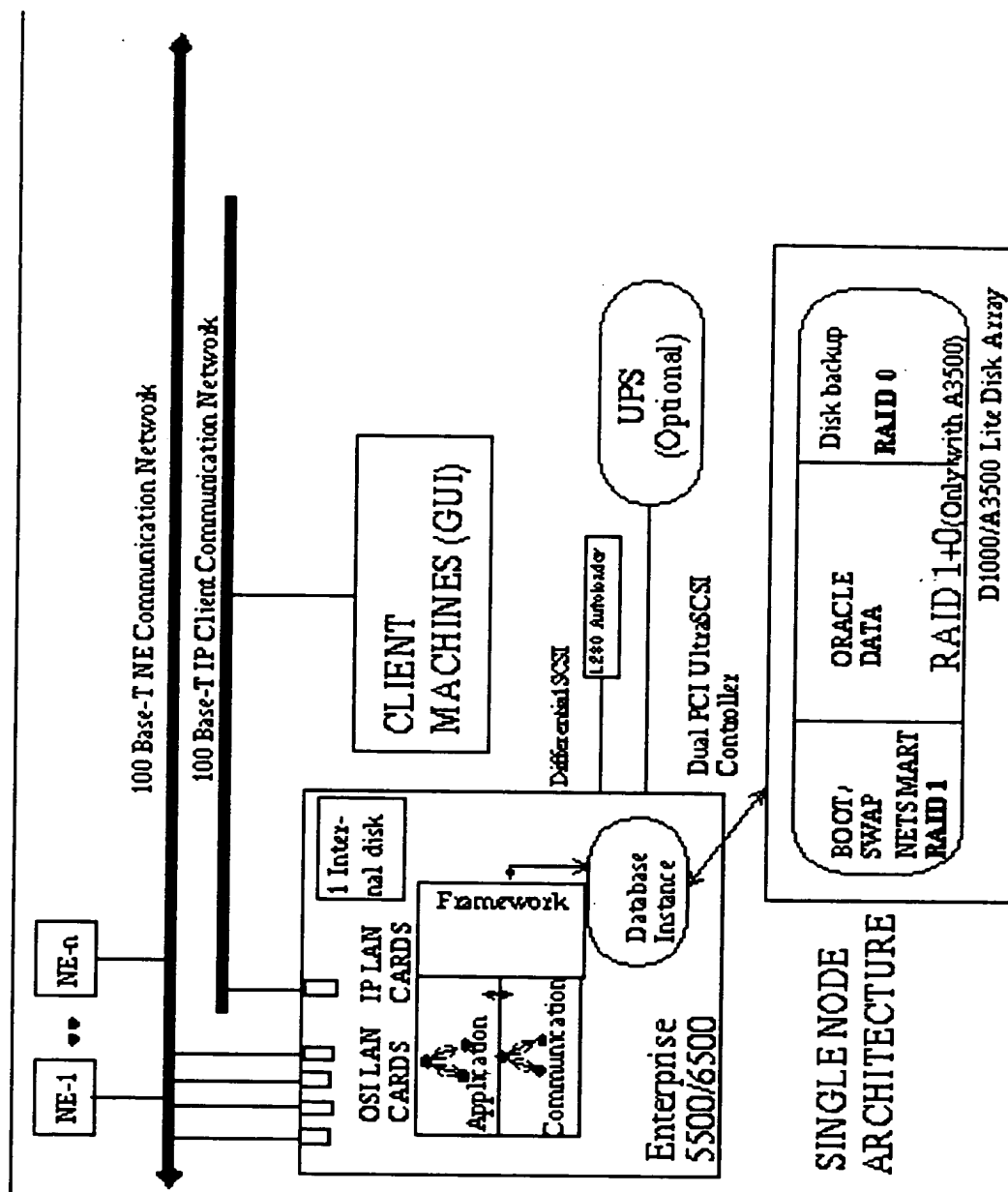


Figure 36

NETSMART Server Architecture

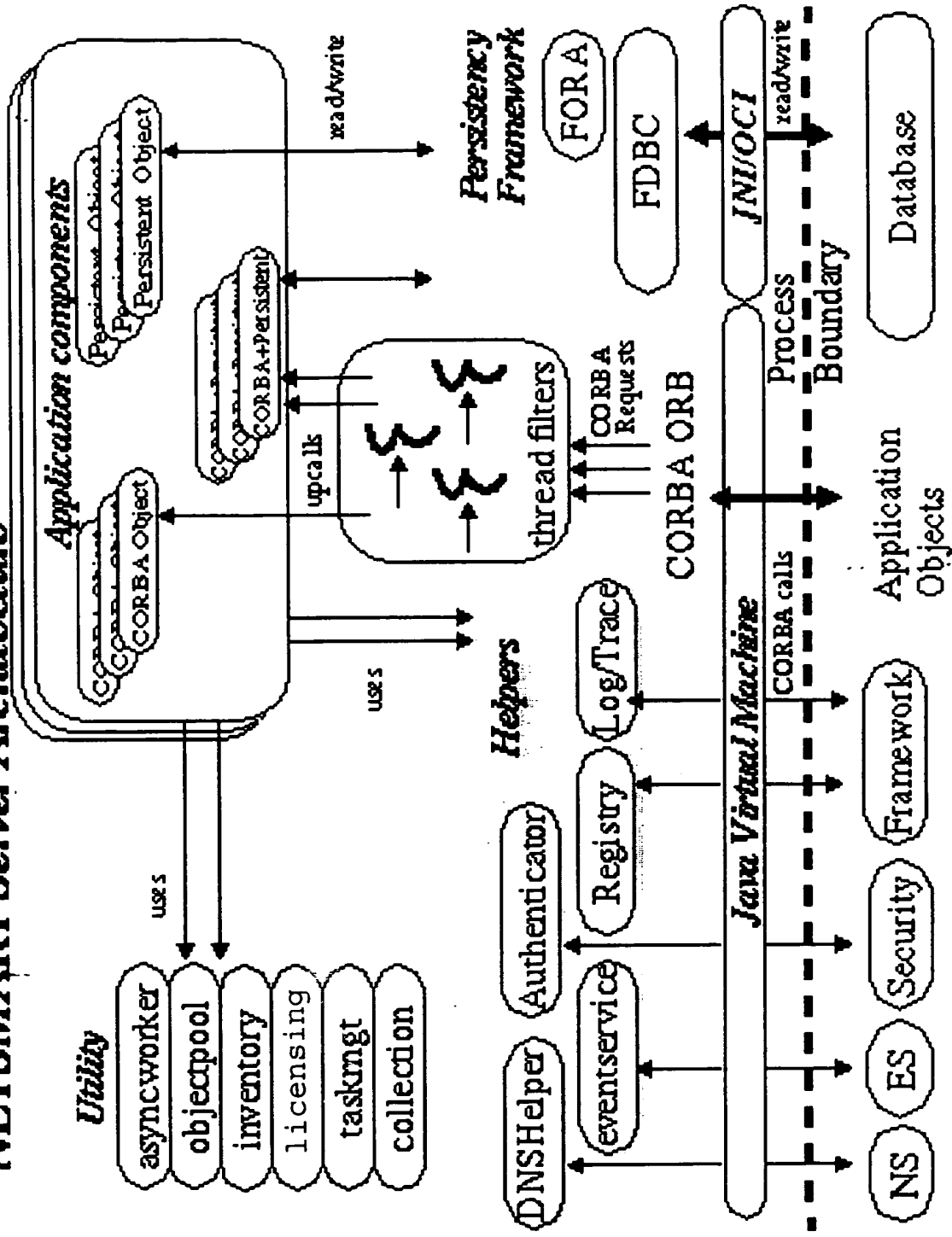


Figure 37

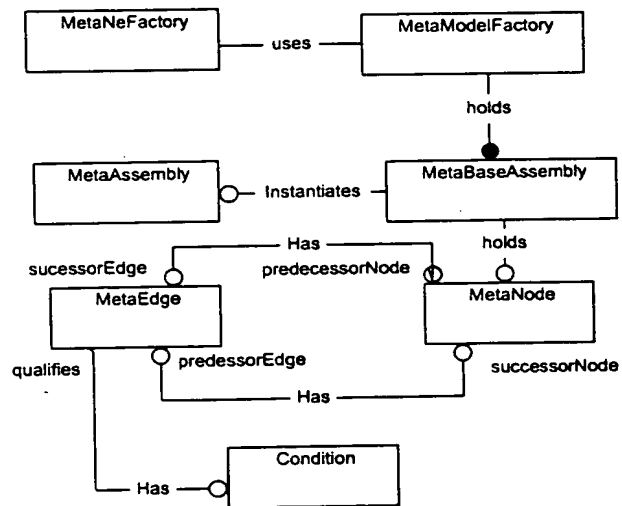


Figure 38

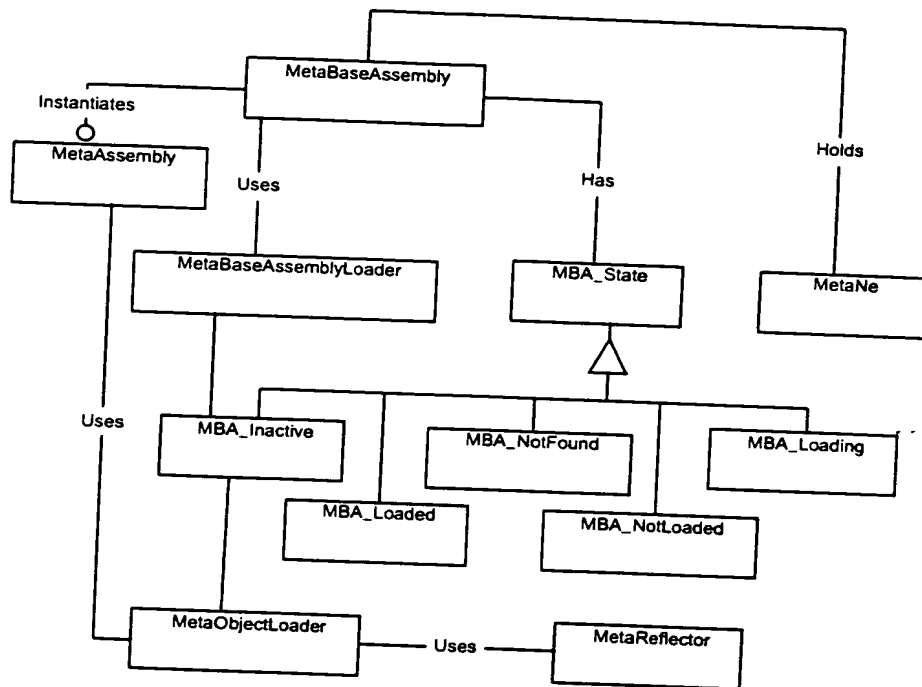


Figure 39

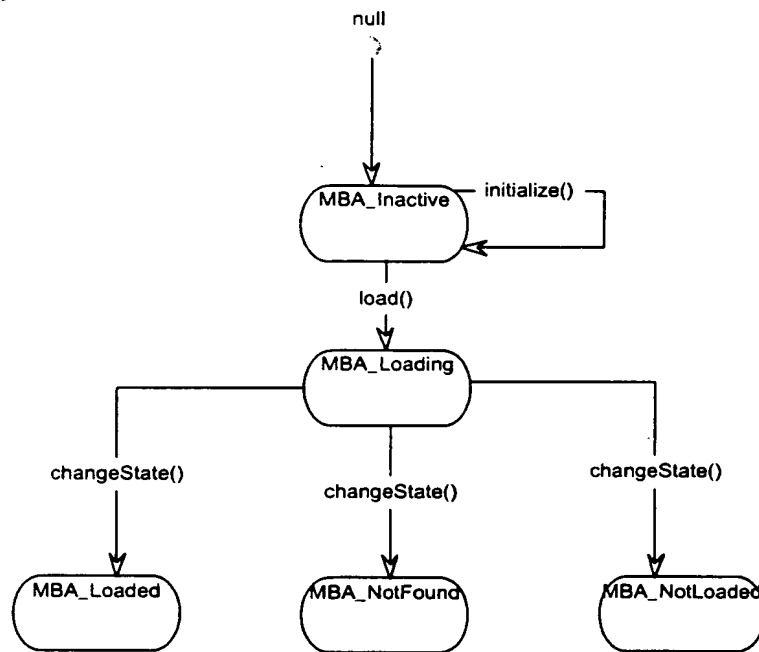


Figure 40

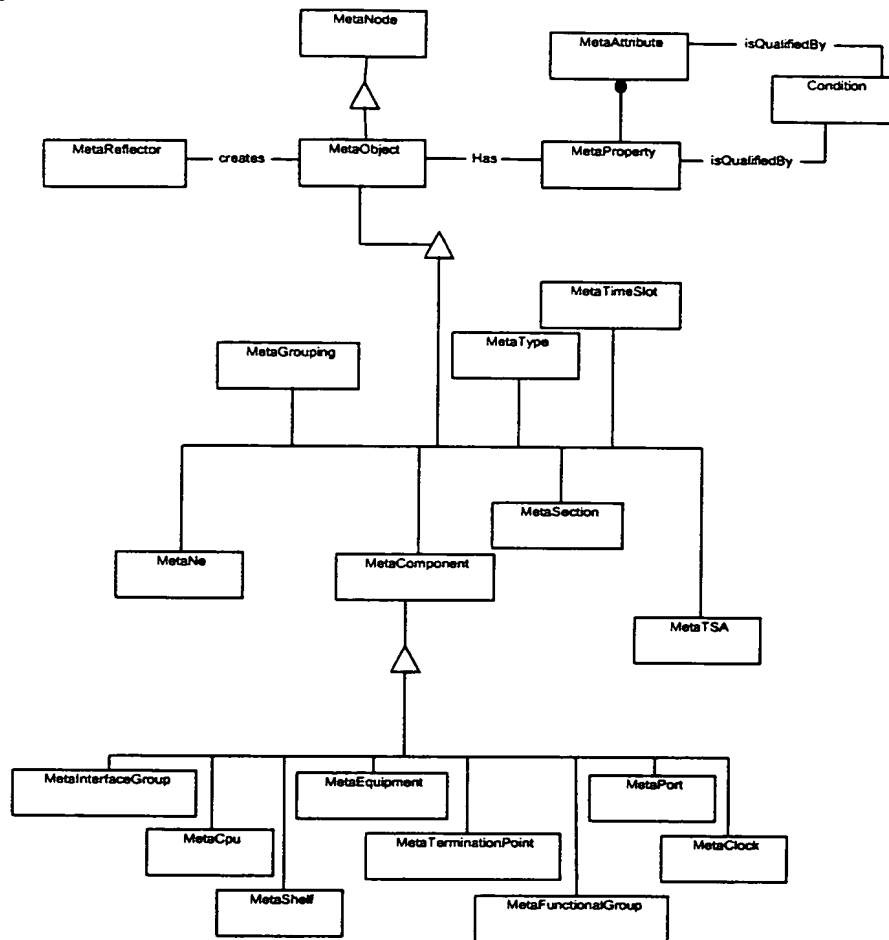


Figure 41

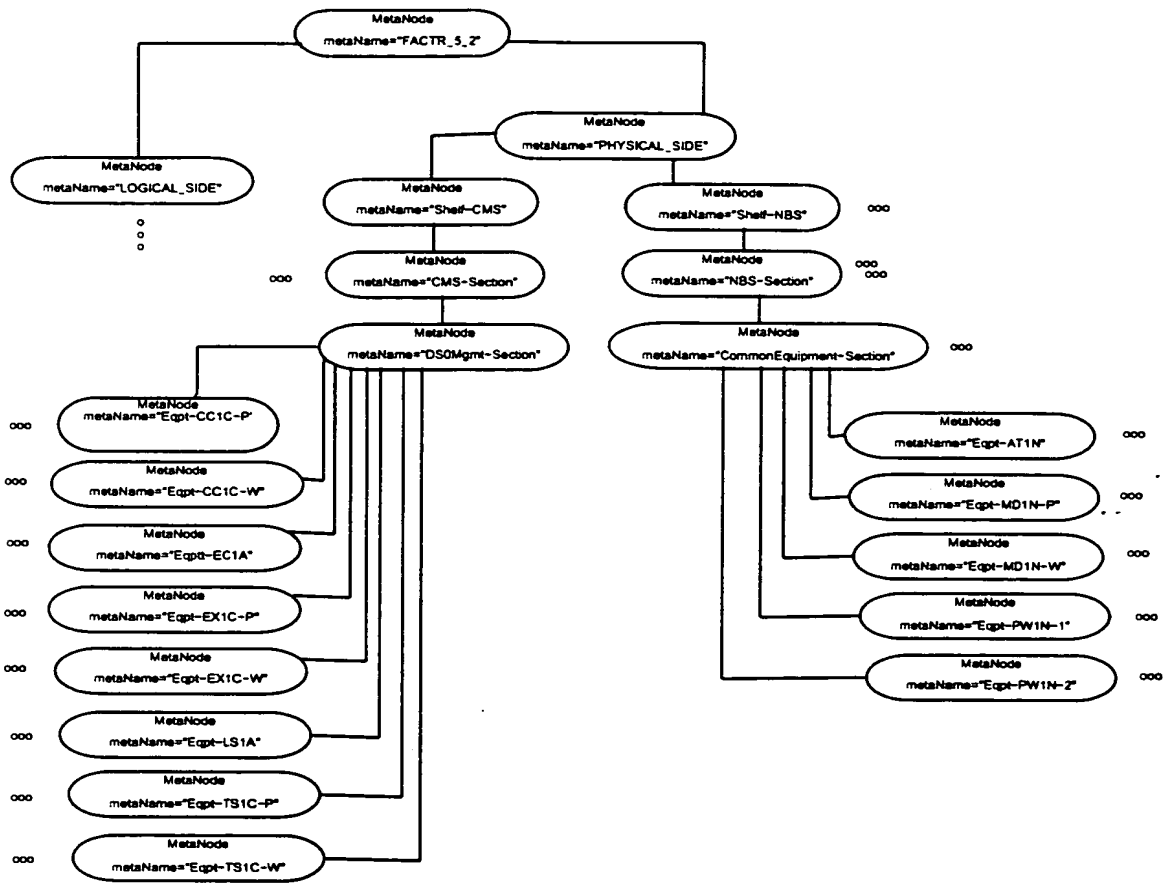


Figure 42